



Fast-Track Referral Report for Civil Design

 286A-B Matakana Road, Warkworth, 0985 (Site)
3 Lot Ultra-Scheme Development

Job No.: 15175-3

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Date: 21 November 2025

Prepared For:

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CHESTER

Revision History

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Distribution

Business/company	Attention	Role
Warkworth RV Limited	s 9(2)(a)	Client
The Planning Collective		Planner
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Viridis Limited		Ecologist
Flow NZ		Traffic
Tonkin+Taylor		Geotech



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1 Introduction

Chester Consultants Ltd (Chester) has been engaged by Warkworth RV Limited to provide a Fast-Track Referral Report with respect to the proposed development at 286A-B Matakana Road, Warkworth, 0985 (Site) known as the Warkworth Residential Development.

The proposed development, located east of Matakana Road, comprises a coordinated residential development which includes approximately 348 standalone dwellings across a range of lots sizes and a retirement village which has approximately 198 villas, care centre, club house and associated amenities (Project). The Project will be distributed across a 54ha site which is comprised of three lots, subject to boundary adjustments.

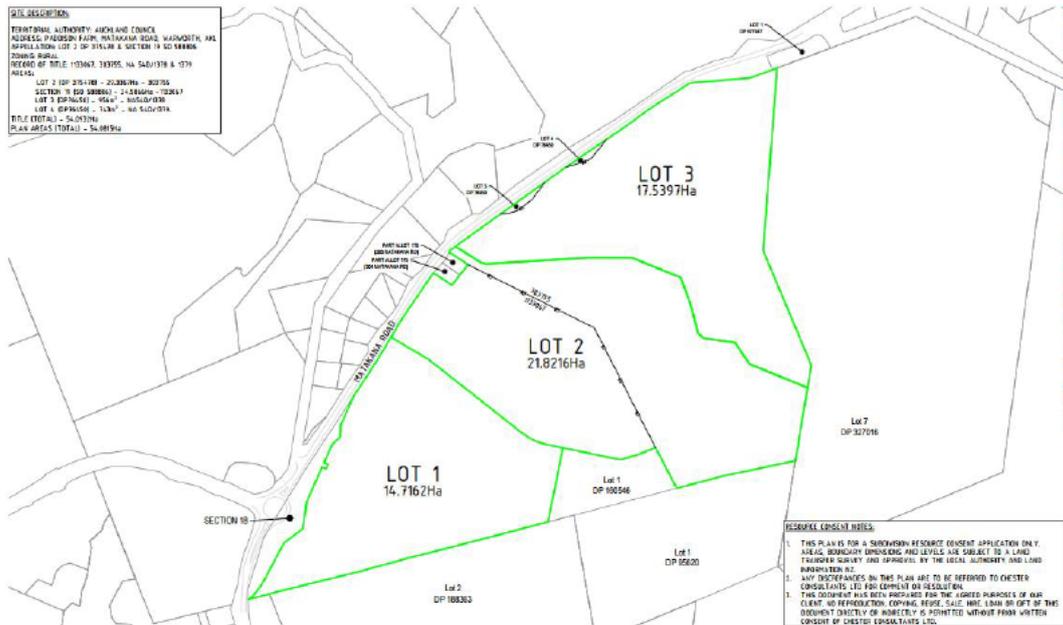


Figure 1 - Proposed Scheme Plan

1.1 Fast Track Approval Referral

Warkworth RV Limited is applying for the Warkworth Residential Development to be referred under the Fast-track Approvals Act 2024.

This report outlines integrated engineering, environmental, and infrastructure concepts that support urban growth, transport integration, stormwater management, and community facilities. It confirms the development can be serviced without increasing downstream flood risk. The report also confirms that there are options which enable the Site to be sufficiently serviced for water and wastewater.

This report relies on data from multiple sources including but not limited to Arvida Limited, Auckland Council including Council Controlled Organisations (Auckland Transport and Watercare Services Limited (Watercare)). Any changes to this data may invalidate recommendations; Chester should be notified for reassessment.

2 Existing Site Description

2.1 Project Site

The Project Site is located to the north of the Warkworth town centre. The Site has rolling grassland hills with gulleys forming wetlands and intermittent streams at the base. The Site has fenced paddocks with livestock and some sheds. The Site lies next to the Rodney Lime Quarry to the east and the Warkworth Golf Club to the north-east. The Site is currently zoned Future Urban and Rural -Mixed Rural. Most of the land opposite the Site on the other side of Matakana Road, is zoned residential and is currently being developed for residential use (Warkworth Ridge – Clayden Road Precinct).



2.2 Boundary Adjustment

The Site is currently made up of two lots, 286A and 286B Matakana Road, legally described as SECT 19 SO 588806 and Lot 2 DP 375478 respectively (refer Figure 2 below). Warkworth RV Limited's application for referral includes a proposed subdivision to adjust the current boundaries to create three lots, as shown in Figure 1 above, to enable the proposed development.



Figure 2 – Existing Paddison Farm boundaries to be adjusted

3 Proposed Site Development

3.1 Retirement Village (Lot 2)

The Retirement Village will be a purpose-built residential community catering for the elderly, providing a mix of independent and duplex living units, and care facilities supported by shared community amenities such as a clubhouse, landscaped gardens, and recreation areas.

The development is expected to include approximately 198 villas, along with a care facility, club house, and associated infrastructure including internal roads, stormwater and wastewater networks, and landscaped open spaces.

3.2 Urban Development (Lot 1)

The Urban Development proposed in Lot 1 is a residential subdivision located immediately adjacent to the Retirement Village. The development will comprise approximately 264 residential lots, generally ranging between 250m² and 300m² area, and four super lots which will provide for approximately 30 residential dwellings. The development will be supported by new internal roads, public infrastructure, and open space reserves which will be provided as part of the Project.

3.3 Large Lot Development (Lot 3)

The Large Lot Development proposed in Lot 3 is a large-lot subdivision located immediately north of the Retirement Village. The development will comprise approximately 54 residential lots, each with a minimum lot size of 2,500 m² with a new public road and infrastructure being provided as part of the Project.



4 Earthworks and Retaining

4.1 Earthworks

Earthworks comprising of both cut and fill operations will be required across the Site, particularly in Lots 1 and 2, to create suitable building platforms, road corridors, and infrastructure levels to enable the development. The earthworks design aims to achieve a balanced cut/fill methodology, minimising the need for import or export of material as far as practicable. Any excess material will be disposed of at an appropriate off-site facility.

Part of the land within Lot 2 (the Retirement Village site) will be cut and regraded, with the excavated material reused as engineered fill to form stable platforms and embankments across the three lots. Limited earthworks are proposed for Lot 3, but there is the potential for any surplus fill material from Lot 2 to be utilised for Lot 3 with the aim to balance the earthwork as far as practical across the Site.

4.2 Erosion and Sediment Control

All earthworks will be undertaken in accordance with Auckland Council's Guidance Document GD05 (Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland Region), and the relevant requirements of the Auckland Code of Practice for Land Development and Subdivision (CoP Chapter 2).

These documents set out best-practice measures for erosion prevention, sediment containment, and site stabilisation during construction. Erosion and sediment control measures such as sediment retention ponds, decanting earth bunds, silt fences, stabilised site entrances, and timely surface stabilisation will be implemented and maintained throughout the duration of works to minimise sediment discharge to the surrounding environment.

4.3 Retaining Walls Concepts and Locations

Retaining structures will be required throughout the development to create stable building platforms, road embankments, and levelled areas suitable for development. While smaller internal retaining structures within the sites are expected to comprise timber pole walls or similar conventional systems, major retaining structures will be required along the southern and eastern boundaries of Lots 1 and 2, where level transitions are most significant. These perimeter walls are anticipated to be mechanically stabilised earth (MSE) walls with landscaped faces, providing both structural stability and an attractive visual outcome. Retained heights across the development are expected to range between 1m and 9m, depending on local topography and design requirements.

5 Stormwater Management

5.1 Existing Stormwater Management

The site currently drains via overland sheet flow into a series of natural gullies that convey runoff toward existing streams and wetlands located at the base of these gullies. There is no formal piped stormwater network within the site.

5.1.1 Downstream Flooding and Sandspit Culvert Restriction

There is flooding further downstream in the catchment at the intersection with Sandspit Road, this is due to the existing undersized culvert crossings, which restricts flows from the upstream catchment. Chester's flood modelling results has confirmed that these culverts are under capacity for both the 10% and 1% AEP storm events, a finding also identified in the Tonkin & Taylor Warkworth Structure Plan Report (which can be provided upon request).

Auckland Transport and Healthy Waters are aware of the culvert capacity constraints, which have been classified as a Level 2 priority for upgrade. However, the timing of these upgrades remains uncertain. Due to this uncertainty the Project proposes to implement flow mitigation measures for the 10% and 1% Annual Exceedance Probability (AEP) events to ensure that post-development runoff does not worsen downstream flooding due to these culverts. Once the culvert upgrades are completed, these mitigation requirements should no longer be necessary.



5.2 Proposed Stormwater Management Plan

Chester considers stormwater for the Project can be appropriately managed through a robust Stormwater Management Plan (SMP). Chester has prepared a comprehensive SMP and Flood Risk Assessment (FRA) for the Project Site. The SMP applies precinct-wide stormwater requirements which establishes the framework and performance targets to be met within the Precinct boundaries, examples being the level of stormwater quality treatment, stormwater quantity treatment, erosion / stream protection.

The stormwater design for this project has been developed in alignment with the objectives and targets outlined in the SMP, which is briefly outlined in the section below.

The SMP and FRA will be provided as part of the substantive application.

5.2.1 Retirement Village (Lot 2)

5.2.1.1 Water Quality Treatment

The retirement village intends to make extensive use of permeable pavements throughout the Site, which are self-treating and provide effective at-source water quality treatment by filtering and infiltrating runoff directly through the pavement structure. The retirement village will also utilise non-contaminant generating (inert) building materials to further minimise potential pollutant loads in stormwater runoff.

Runoff from the proposed public road providing access to the retirement village of this report, will be directed to a typical GD01 compliant raingarden for treatment prior to discharge into the existing stream network.

5.2.1.2 Stream Erosion Protection

Stream erosion protection will be achieved by implementing Stormwater Management Area Flow (SMAF) mitigation measures in accordance with Auckland Council's GD01 design guidelines. Retention will be provided through the installation of roof rainwater collection tanks for all roof areas, enabling on-site reuse of captured stormwater for non-potable purposes such as garden irrigation and greywater supply. In addition, the extensive use of permeable pavements proposed throughout the retirement village will promote infiltration and delay runoff.

5.2.1.3 10% and 1% AEP Flow Mitigation

To address 10% and 1% AEP flow mitigation requirements for the retirement village, the proposed approach is to incorporate in-stream flow restriction structures that temporarily detain peak runoff and reduce downstream flow rates during major storm events, specifically the 10% and 1% AEPs.

The design uses an engineered stream bank profile, constructed with gabion baskets, to act as an in-stream weir which maintains the natural stream bed and base flow regime for ecological health. These weirs create upstream detention during rainfall events exceeding the pre-development 10% AEP threshold, up to the 1% AEP, attenuating peak discharges from major storms. This reduces downstream flooding while preserving continuous low-flow passage and overall stream function.

5.2.1.4 Piped Network

The retirement village will be serviced by two new stormwater pipe networks, a private network for the retirement village itself and a public network for the public road infrastructure will be constructed and vested to the Council. The private network will collect runoff from roofs, internal roads, and paved areas, discharging to the existing streams via outlets with erosion protection designed in accordance with Auckland Council's GD08 (Stormwater Outfall Design Guideline).

The public network will service the new public road south of the village and the upgraded section of Matakana Road to the east, also discharging through GD08 compliant outlets.

Both networks will be designed to accommodate the 10% AEP storm event in accordance with Auckland Council's Stormwater Code of Practice.



5.2.2 Urban Development (Lot 1)

5.2.2.1 Water Quality Treatment

The Urban Development will achieve stormwater quality treatment through a series of end-of-pipe bioretention devices, designed in accordance with Auckland Council's GD01. These devices will provide both primary and secondary treatment of runoff from the residential catchment, capturing and filtering contaminants before discharge to the natural drainage network. Dwellings within the development will also utilise non-contaminant generating (inert) building materials to minimise pollutant loads at source.

5.2.2.2 Stream Erosion Protection

Stream erosion protection will be achieved by implementing Stormwater Management Area Flow (SMAF) mitigation measures in accordance with Auckland Council's GD01 design guidelines. Retention will be provided through the installation of roof rainwater collection tanks for all roof areas, enabling on-site reuse of captured stormwater for non-potable purposes such as garden irrigation and greywater supply.

5.2.2.3 10% and 1% AEP Flow Mitigation

To address the 10% and 1% AEP flow mitigation requirements for the Urban Development, the proposed approach is to incorporate in-stream flow restriction structures that temporarily detain peak runoff and reduce downstream flow rates during major storm events.

The design intends to use an engineered stream bank profile, constructed with gabion baskets, to act as an in-stream weir which maintains the natural stream bed and base flow regime for ecological health. These weirs create upstream detention during rainfall events exceeding the pre-development 10% AEP threshold, up to the 1% AEP, attenuating peak discharges from major storms. This reduces downstream flooding while preserving continuous low-flow passage and overall stream function.

5.2.2.4 Piped Network

The Urban Development will be serviced by a new public stormwater pipe network with lot connections, that will be vested in Auckland Council upon completion. The network will collect runoff from roads, roofs, and paved areas and convey it to the bioretention devices mentioned in 5.2.2.1 above.

Treated flows will then outfall to the existing stream network via outlets with erosion protection designed in accordance with Auckland Council's GD08. The entire stormwater network will be designed to accommodate the 10% Annual Exceedance Probability (AEP) event in accordance with Auckland Council's Stormwater Code of Practice.

5.2.3 Large Lot Development (Lot 3)

5.2.3.1 Water Quality Treatment

The Large Lot Development intends to manage stormwater quality through either proprietary treatment devices, end-of-pipe biofiltration devices, low-impact design (LID) measures or a combination of these in a treatment train approach where appropriate. Runoff from the Matakana Road upgrades, including the new roundabout and frontage widening, are intended to be directed to a treatment device sized for the contributing catchment and specific contaminants, prior to discharge into the existing stream network.

Stormwater from internal public roads will be conveyed to LID treatment devices, providing natural filtration and treatment appropriate for the low-volume rural road environment. Buildings and hardstand structures within the development will also utilise inert materials.

5.2.3.2 Stream Erosion Protection

Stream erosion protection will be achieved through implementation of Stormwater Management Area Flow (SMAF) mitigation measures in accordance with Auckland Council's GD01. Retention will be provided via roof rainwater collection tanks on all dwellings, enabling on-site reuse for non-potable purposes such as irrigation and greywater supply.

5.2.3.3 10% and 1% Flow Mitigation

To achieve 10% and 1% AEP flow mitigation, the proposal is to provide a combination of on-lot and end-of-pipe detention measures. Flow attenuation may be achieved through additional detention volume within individual roof rainwater collection tanks, through communal end-of-pipe detention ponds, or by a combination of both approaches depending on detailed design.



These systems will be sized to mitigate post-development runoff for all storm events exceeding the pre-development 10% AEP flow rate up to and including the 1% AEP event, mitigating downstream discharge rates appropriately for the purpose of not exacerbating the existing downstream flooding.

5.2.3.4 Piped Network

The Large Lot Development will likely be serviced by a combination of vested public and private systems; the public roading drainage and treatment will require a public network but given the size of the lots proposed it is anticipated that the individual lots will manage stormwater onsite; they would typically dispose to ground. Reticulated connections could be fully or partially provided, if desired but they are not considered to be required.

Where outfalls are proposed the treated flows will outfall to the existing stream network via outlets with erosion protection designed in accordance with Auckland Council’s GD08. The entire stormwater network will be designed to accommodate the 10% Annual Exceedance Probability (AEP) event in accordance with Auckland Council’s Stormwater Code of Practice.

6 Wastewater Management

6.1 Existing Wastewater Management

6.1.1 Snells Beach WWTP

The Snells Beach Wastewater Treatment Plant (WWTP) officially opened in September 2025. This new treatment plant is a major upgrade in the regional wastewater infrastructure. It is designed for scalability, current capacity is 18,000 people, with plans to expand capacity with the Stage 2 upgrade to 30,000 people ahead of population growth through to 2050+.

We estimate the current connected population is less than 12,000 vs the 18,000 of current capacity.

6.1.2 Warkworth NW Growth Servicing Pipeline

The Warkworth North-West Growth Servicing Pipeline, currently under construction, will unlock additional development capacity in the north-west area of Warkworth, where the existing network constraints currently limit new wastewater connections.

The pipeline will traverse from the Warkworth Showgrounds, through the town centre, and connect into the Lucy Moore Pump Station, which ultimately conveys flows to the new Snells Beach WWTP. The earliest portion (Elizabeth Street to Lucy Moore) is targeted for operation by December 2026, with full completion of the remaining sections scheduled for December 2027.

Once operational, the pipeline will allow development north of the Mahurangi River to connect to the wastewater network (subject to new treatment capacity).



Figure 3 - Warkworth Growth Servicing Pipeline Map (Source: Water Website 10/10/2025)



6.2 Proposed Wastewater Management

Currently, there is no public wastewater connection near the site, so the Project will provide a new public wastewater pump station and associated rising main. Watercare has confirmed that there is sufficient network capacity in the short to medium term to accommodate wastewater flows from the Project via the existing network at Hill Street which is being connected into the North-West Growth Servicing Pipeline. Wastewater from the Project will be conveyed via a new rising main from the Site to the existing manhole located in the carpark at the corner of Sandspit Road and Great North Road.

Chester sketches in Annexure B.

In the longer term, the Project will be required to connect to the new Watercare pump station proposed at 187 Sandspit Road, which is designated for future wastewater servicing of north-west Warkworth. The rising main between the Hill Street carpark manhole and the 187 Sandspit Road pump station will be provided by the Project and connected as soon as that facility is commissioned. The rising main can be fitted with the required valve arrangement, near the intersection of Matakana and Sandspit Road, to enable a future switch-over without the need for further construction/alterations.

6.2.1 Retirement Village (Lot 2)

6.2.1.1 Piped Network

The retirement village will be serviced by a new private gravity wastewater network designed to collect flows from dwellings, care facilities, and community facilities within the site, and will discharge to a new private wastewater pump station located within the retirement village.

6.2.1.2 Discharge

The pump station mentioned in 6.2.1.1 above will convey flows via a rising main into the proposed gravity wastewater network within the Urban Development (Lot 1), from where wastewater will ultimately connect into the wider public network once available. As explained above, the requisite wastewater infrastructure is anticipated to be operational prior to the development of the retirement village.

If there are network constraints at the time of development, there is an option to provide a temporary private treatment plant and disposal field on site, within the retirement village, until additional network capacity which has been commissioned by Watercare (as outlined in Section 6.1 above) comes on line.

This methodology aligns with Watercare's servicing strategy for the Warkworth North area.

6.2.2 Urban Development (Lot 1)

6.2.2.1 Piped Network

The Urban Development intends to be serviced by a combination of public gravity and public low-pressure sewer (LPS) wastewater networks, providing private lot connections throughout the subdivision. These networks will discharge to the new public wastewater pump station located within Lot 1. The public network will be funded and implemented through the Project and vested in Auckland Council upon completion.

The gravity network intends to be designed to include two additional connection points, enabling integration of wastewater flows from the adjacent Retirement Village, and Large Lot Development further north, into the same public pump station, ensuring an efficient and coordinated servicing arrangement across the wider development.

6.2.2.2 Discharge

The new public wastewater pump station will convey flows to the new public rising main proposed along Matakana Road, which will connect to the wider Watercare network as discussed above in 6.2. We understand from Watercare there is currently sufficient capacity at Snells Beach Wastewater Treatment Plant, and more capacity becoming available through the Warkworth North-West Growth Servicing Pipeline.



6.2.3 Large Lot Development (Lot 3)

Lot 3 is proposed as large lot residential. The development of this lot has not considered by the FDS as it is outside the Future Urban Zone. The Project intends for approximately 54 dwellings to be constructed on Lot 3. This limited number of dwellings reduces the demand for wastewater produced and we do not consider there will be material constraints in connecting it to the public network. However, if at the time of development there is insufficient capacity in the network, Lot 3 could use conventional onsite wastewater systems to self-service.

6.2.3.1 Piped Network

The Large Lot Development intends to be serviced by a new low-pressure sewer (LPS) system, comprising private lot connections that discharge into a public LPS network. This public LPS network will convey flows to a new rising main proposed along Matakana Road, located at the site frontage. The public LPS network and rising main will be vested in Auckland Council upon completion, while the on-lot components will remain privately owned and maintained.

6.2.3.2 Discharge

The new rising main along the site frontage intends to connect into the public gravity wastewater network within Lot 1 (Urban Development), as described in Section 6.2.2.1 above. Based on Watercare's planned and funded upgrades, it is anticipated the demand from Lot 3 will be able to be serviced through public infrastructure.

7 Water Supply Network

This section outlines the water supply strategy for the Project, with intent of connecting to the Watercare network. Currently, there is no public water connection for the development, however, there is an opportunity to extend an existing public 225mm principal water main near the new Matakana Road roundabout intersection with Te Honohono Ki Tai Road.

7.1 Existing Water Supply

7.1.1 Existing Network Capacity

The Warkworth water supply is stored in two main reservoirs, View Road and Thompson Road, which serve the existing urban area. These reservoirs act as buffer storage, allowing the treatment plant (fed by Hudson Road bores and the Sanderson Road water treatment facility) to maintain a stable supply during peak demand.

There is currently capacity to supply the northeast Warkworth area. Watercare has planned infrastructure upgrades scheduled to be completed in 2028 which will provide additional capacity for water supply.

Chester understands that in 2028 the water supply network will be servicing 8,585 people, when there is capacity to service 12,500 people. This provides capacity for 3915 additional people which equates to around 16 years of growth in Warkworth. The stage 3 Watercare upgrades are planned for January 2036, in just over 10 years, which will provide even further water supply capacity for the area. It is our view that growth has been planned, and allowed for, and the Project is well aligned to the current timing.

In respect to the 2028 horizon, in practical terms it is unlikely that any demand from this development would occur prior to the upgrades given the time associated with developments of this scale.

7.2 Proposed Water Supply

All the options outlined below will include the provision of fire water supply as per Standard New Zealand Publicly Available Specification 4509 (SNZ PAS 4509:2008), non-sprinklered single family and multi-unit dwellings (excluding multi-story apartments) requiring fire water supplies classified as FW2.

7.2.1 Retirement Village (Lot 2)

The retirement village intends to connect to Watercare's public infrastructure along Matakana Road by extending the existing principal main to a suitable point in front of the Site, from where a new internal private network will be extended to service the development.



If public network capacity and/or pressure is insufficient when the construction of the retirement village is complete, temporary measures to address network capacity and/or pressure can be implemented. These include:

- The provision of a private bore and treatment plant, with storage tanks and pumps to accommodate peak demand. Tonkin & Taylor has prepared a Bore Permit report for this option which will be provided in the substantive application.
- On-site reservoir or storage tanks with booster pumps, fed by the public network, decommissioned once flow and pressure improve with the addition of the northern reservoir.

7.2.2 Urban Development (Lot 1)

A new water connection is intended to be installed at a suitable location along Matakana Road to connect the Urban Development to Watercare's public infrastructure, from where a new internal public water supply network will service the wider development, with private lot connections. The new public network will be vested to Auckland Council upon completion.

The Urban Development will not be occupied until it can connect to Watercare's public infrastructure. If, when this connection becomes available, public network capacity and/or pressure is insufficient, temporary measures can be implemented. These include:

- On-site reservoir or storage tanks with booster pumps, fed by the public network, decommissioned once capacity or pressure improves.

7.2.3 Large Lot Development (Lot 3)

The existing public principal main is intended to be extended along Matakana Road, to a suitable connection location in front of the Large Lot Development, from where a new internal public water supply network will service the wider development, with private lot connections. The new public network will be vested to Auckland Council upon completion.

As outlined above, Lot 3 is outside the Future Urban Zone therefore Watercare has not considered the servicing of this land in the FDS. However the demand from the development of Lot 3 will be limited (as it provides for 54 lots of be developed). If public network capacity and/or pressure is insufficient when Lot 3 is developed, temporary measures include:

- On-site reservoir or storage tanks with booster pumps, fed by the public network, decommissioned once capacity or pressure improves.
- Rainwater collection tanks treated to potable standards as an interim solution.

8 Conclusions

8.1 Earthworks and Retaining

The proposed development will require earthworks in Lots 1 and 2 to create building platforms and road corridors, while Lot 3 will need less works. A balanced cut-and-fill approach will minimise material import/export, with surplus fill from Lot 2 reused in Lot 3 where possible. Any excess material will be disposed at an appropriate off-site facility. Joint earthworks between the Retirement Village and Urban Development will improve efficiency and reduce haulage impacts. Retaining structures will include large perimeter MSE walls for stability and aesthetics, supported by smaller timber pole walls for internal level changes.

Erosion and sediment control will follow Auckland Council's GD05 guidelines, using best-practice measures such as sediment ponds, silt fences, and stabilised site entrances.

8.2 Stormwater Network

The proposed stormwater strategy integrates water quality treatment, flow mitigation, and erosion control measures across all three lots in accordance with Auckland Council's GD01 and GD08 guidelines. Each development incorporates tailored solutions: permeable pavements and rainwater tanks for the Retirement Village, bioretention ponds and rainwater tanks for the Urban Development, and a combination of proprietary and biofiltration devices, swales, and rainwater tanks for the Large Lot Development.

To manage downstream flooding risks, in-stream flow restriction structures and detention measures will attenuate peak discharges for 10% and 1% AEP events. Collectively, these measures ensure compliance



with council performance objectives, maintain stream stability, and prevent adverse effects on the receiving environment.

8.3 Wastewater Network

The proposed wastewater strategy ensures all three developments can be serviced efficiently and in alignment with Watercare’s long-term infrastructure plans.

Each lot will implement a coordinated network approach:

- the Retirement Village will use a private gravity system discharging to a private pump station, lifting wastewater to the public wastewater network in Lot 1;
- the Urban Development will establish both gravity and LPS public networks, with a public pump station, vested with Auckland Council. The network will provide connection points for both lots 2 and 3 to connect;
- the Large Lot Development will adopt a low-pressure sewer system connecting into a new rising main along Matakana Road.

In the short to medium term, wastewater will discharge into the public network at Hill Street and Sandspit Road via a new rising main along Matakana Road where there is existing capacity. Longer term, flows will be redirected to the proposed pump station at 187 Sandspit Road by extending the rising main from the Hill Street connection. The Project includes interim measures to service wastewater if there are constraints when the Project is completed.

8.4 Water Supply Network

The proposed water strategy ensures all three developments can be serviced efficiently and in alignment with Watercare’s long-term infrastructure plans.

The entire development area can be serviced from 2028; and the 2028 upgrades provide for enough growth in Warkworth until Stage 3 works are undertaken in 2036.

The project proposes short term servicing solutions with a booster pump (entire project) and or alternative water sources with bore (retirement village) and rain water harvesting (large lot) to mitigate any short term limitations however unlikely.



9 Limitations

This assessment contains the professional opinion of Chester Consultants as to the matters set out herein, in light of the information available to it during the preparation, using its professional judgement and acting in accordance with the standard of care and skill normally exercised by professional engineers providing similar services in similar circumstances. No other express or implied warranty is made as to the professional advice contained in this report.

We have prepared this report in accordance with the brief as provided and our terms of engagement. The information contained in this report has been prepared by Chester Consultants at the request of Warkworth RV Limited and is exclusively for its client use and reliance. It is not possible to make a proper assessment of this assessment without a clear understanding of the terms of engagement under which it has been prepared, including the scope of the instructions and directions given to and the assumptions made by Chester Consultants Ltd. The assessment will not address issues which would need to be considered for another party if that party's particular circumstances, requirements and experience were known and, further, may make assumptions about matters of which a third party is not aware. No responsibility or liability to any third party is accepted for any loss or damage whatsoever arising out of the use of or reliance on this assessment by any third party.

The assessment is also based on information that has been provided to Chester Consultants Ltd from other sources or by other parties. The assessment has been prepared strictly on the basis that the information that has been provided is accurate, completed, and adequate. To the extent that any information is inaccurate, incomplete or inadequate, Chester Consultants Ltd takes no responsibility and disclaims all liability whatsoever for any loss or damage that results from any conclusions based on information that has been provided to Chester Consultants Ltd.

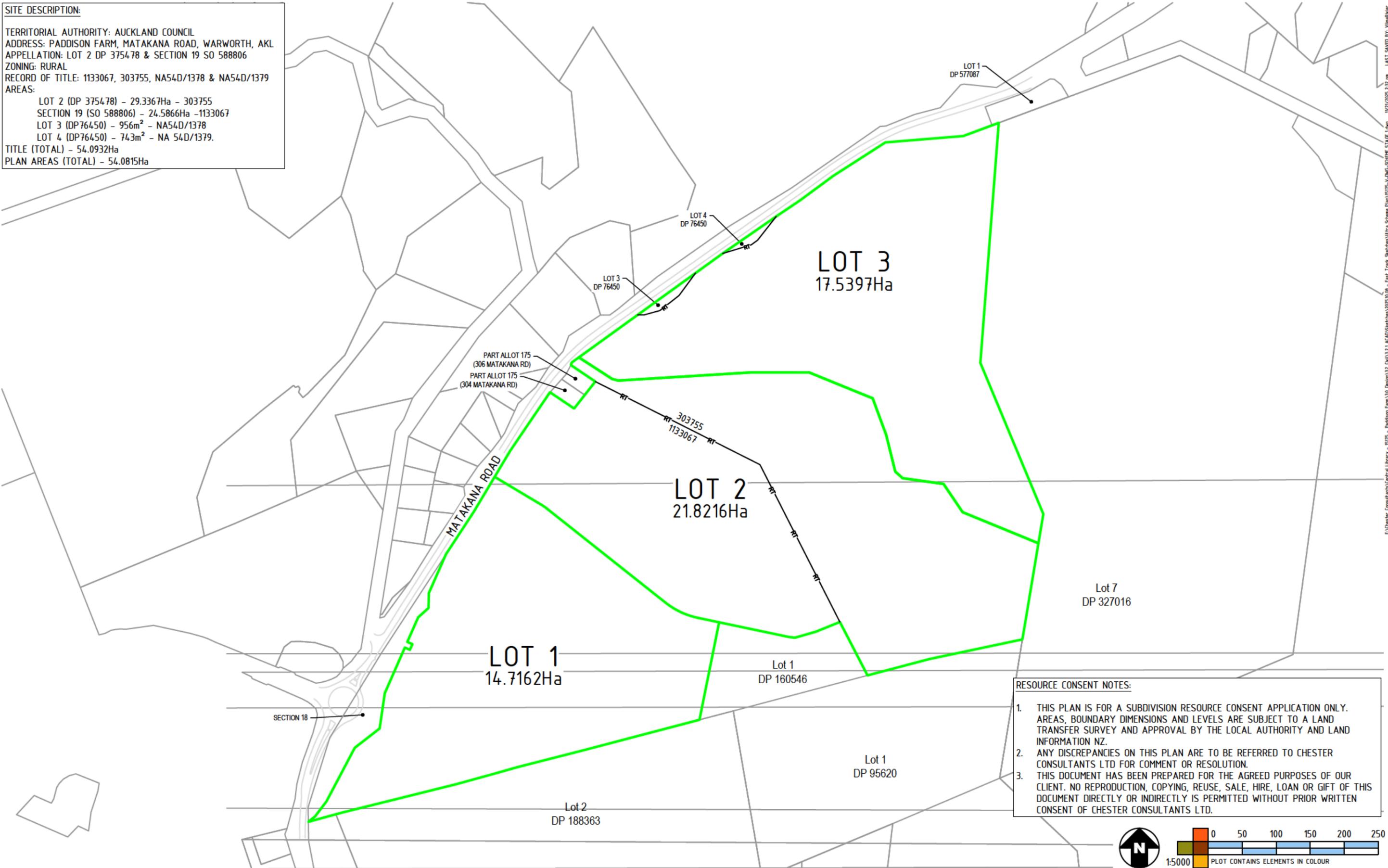


10 Appendices

Appendix A – Proposed Scheme Plan



SITE DESCRIPTION:
 TERRITORIAL AUTHORITY: AUCKLAND COUNCIL
 ADDRESS: PADDISON FARM, MATAKANA ROAD, WARWORTH, AKL
 APPELLATION: LOT 2 DP 375478 & SECTION 19 SO 588806
 ZONING: RURAL
 RECORD OF TITLE: 1133067, 303755, NA54D/1378 & NA54D/1379
 AREAS:
 LOT 2 (DP 375478) - 29.3367Ha - 303755
 SECTION 19 (SO 588806) - 24.5866Ha - 1133067
 LOT 3 (DP76450) - 956m² - NA54D/1378
 LOT 4 (DP76450) - 743m² - NA 54D/1379.
 TITLE (TOTAL) - 54.0932Ha
 PLAN AREAS (TOTAL) - 54.0815Ha



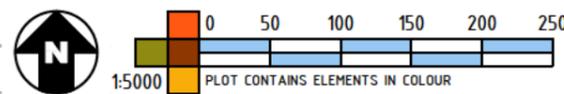
RESOURCE CONSENT NOTES:

1. THIS PLAN IS FOR A SUBDIVISION RESOURCE CONSENT APPLICATION ONLY. AREAS, BOUNDARY DIMENSIONS AND LEVELS ARE SUBJECT TO A LAND TRANSFER SURVEY AND APPROVAL BY THE LOCAL AUTHORITY AND LAND INFORMATION NZ.
2. ANY DISCREPANCIES ON THIS PLAN ARE TO BE REFERRED TO CHESTER CONSULTANTS LTD FOR COMMENT OR RESOLUTION.
3. THIS DOCUMENT HAS BEEN PREPARED FOR THE AGREED PURPOSES OF OUR CLIENT. NO REPRODUCTION, COPYING, REUSE, SALE, HIRE, LOAN OR GIFT OF THIS DOCUMENT DIRECTLY OR INDIRECTLY IS PERMITTED WITHOUT PRIOR WRITTEN CONSENT OF CHESTER CONSULTANTS LTD.

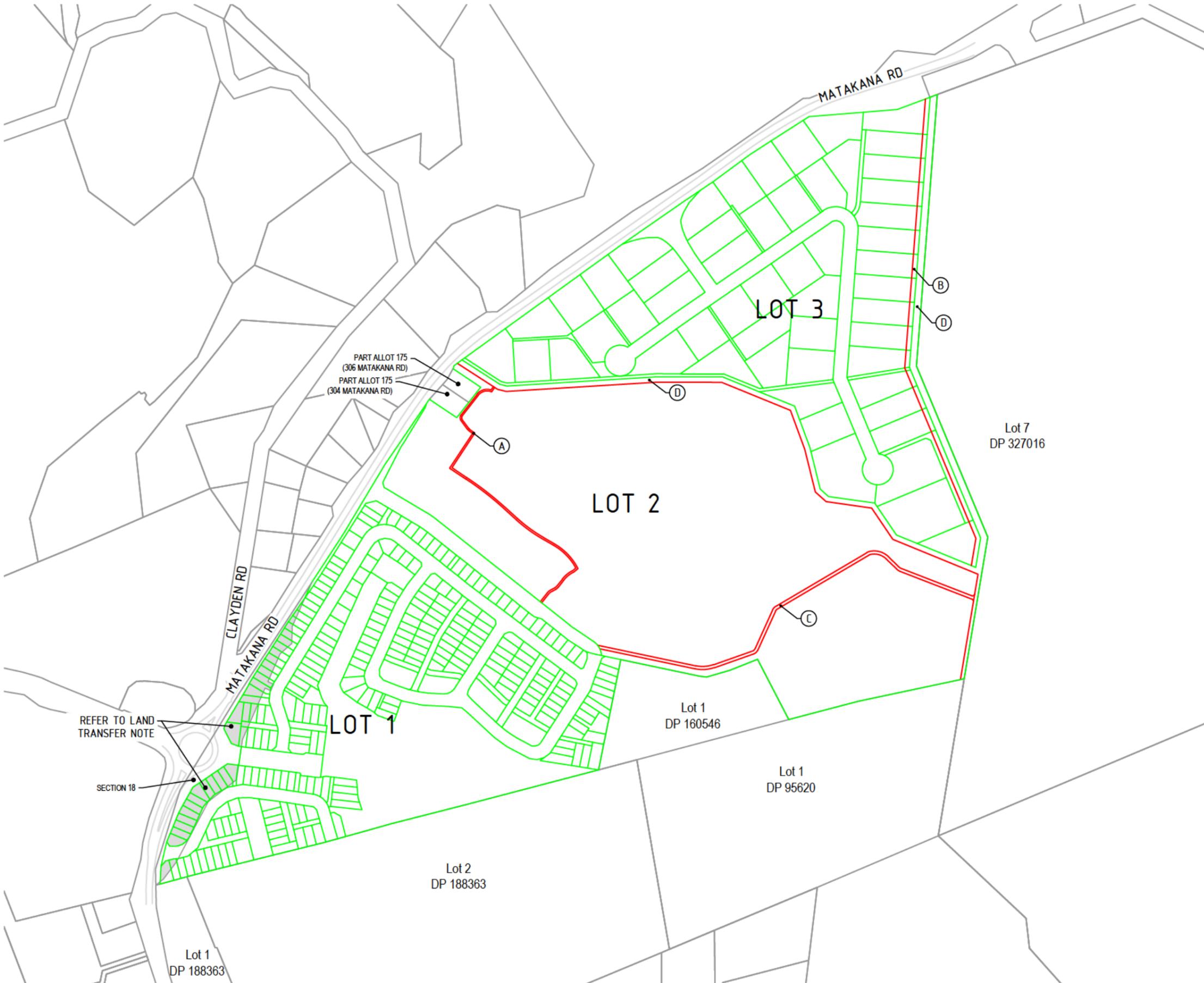
Rev	Date	Amendments	By

Drafter: V RIVIER Job Title: WARKWORTH RV DEVELOPMENT
 Designer: J PHILIPS Client: WARKWORTH RV LIMITED
 Checker: J PHILIPS Address: MATAKANA ROAD, WARKWORTH 0985
 Date: 20/11/2025 Drawing Title: SCHEME PLAN - SUPERLOTS

Drawing: 120 Rev: 0
 Scale: 1:5000 @ A3
 Project: 15175
 Issue: INFORMATION



E:\Chester Consultants\Central Library - 15175 - Paddison Farm\30 Design\32 Cvt\3.2.1 ACAD\Sheet\ha\2025\0208 - Fast Track Sketch\1175 Scheme Plans\15175 - V-DWG-SCHIEVE STAGE Long 19/11/2025 2:32 pm LAST SAVED BY: V-Rivier



SITE DESCRIPTION:
 TERRITORIAL AUTHORITY: AUCKLAND COUNCIL
 ADDRESS: PADDISON FARM, MATAKANA ROAD, WARWORTH, AKL
 APPELLATION: LOT 2 DP 375478 & SECTION 19 SO 588806
 ZONING: RURAL
 RECORD OF TITLE: 1133067, 303755, NA54D/1378 & NA54D/1379
 AREAS:
 LOT 2 (DP 375478) - 29.3367Ha - 303755
 SECTION 19 (SO 588806) - 24.5866Ha - 1133067
 LOT 3 (DP76450) - 956m² - NA54D/1378
 LOT 4 (DP76450) - 743m² - NA 54D/1379.
 TITLE (TOTAL) - 54.0932Ha
 PLAN AREAS (TOTAL) - 54.0775Ha

MEMORANDUM OF EASEMENTS			
PURPOSE	SHOWN	BURDENED LAND (SERVIENT TENEMENT)	BENEFITED LAND (DOMINANT TENEMENT)
LANDSCAPING	B	LOT 3 HEREON	LOT 2 HEREON

MEMORANDUM OF EASEMENTS IN GROSS - TEMPORARY EASEMENT			
PURPOSE	SHOWN	BURDENED LAND (SERVIENT TENEMENT)	GRANTEE
RIGHT OF WAY (WALKING & CYCLING)	A	LOT 2 HEREON	AUCKLAND COUNCIL

MEMORANDUM OF EASEMENTS IN GROSS			
PURPOSE	SHOWN	BURDENED LAND (SERVIENT TENEMENT)	GRANTEE
RIGHT OF WAY (WALKING & CYCLING)	D	LOT 2 HEREON	AUCKLAND COUNCIL
RIGHT OF WAY (WALKING & CYCLING)	C	LOT 2 HEREON	AUCKLAND COUNCIL

TEMPORARY EASEMENT NOTE:
 EASEMENT 'A' IS TEMPORARY AND IS TO BE REMOVED ONCE MATAKANA ROAD UPGRADES HAVE BEEN COMPLETED AND EASEMENT 'D' CAN CONNECT TO THE PUBLIC ROAD PEDESTRIAN FACILITIES.

RESOURCE CONSENT NOTES:

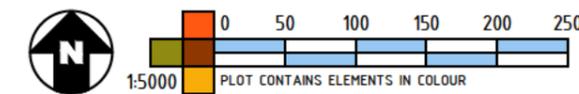
- THIS PLAN IS FOR A SUBDIVISION RESOURCE CONSENT APPLICATION ONLY. AREAS, BOUNDARY DIMENSIONS AND LEVELS ARE SUBJECT TO A LAND TRANSFER SURVEY AND APPROVAL BY THE LOCAL AUTHORITY AND LAND INFORMATION NZ.
- ANY DISCREPANCIES ON THIS PLAN ARE TO BE REFERRED TO CHESTER CONSULTANTS LTD FOR COMMENT OR RESOLUTION.
- THIS DOCUMENT HAS BEEN PREPARED FOR THE AGREED PURPOSES OF OUR CLIENT. NO REPRODUCTION, COPYING, REUSE, SALE, HIRE, LOAN OR GIFT OF THIS DOCUMENT DIRECTLY OR INDIRECTLY IS PERMITTED WITHOUT PRIOR WRITTEN CONSENT OF CHESTER CONSULTANTS LTD.

LAND TRANSFER NOTE:
 PROPOSED PORTION OF SECTION 18 TO BE TRANSFERRED TO DEVELOPER BY AUCKLAND TRANSPORT AS PART OF ROAD STOPPING PROCESS, ADDITIONALLY THE PROPOSED AREA IS SUBJECT TO A S178 APPROVAL FROM AUCKLAND TRANSPORT, AS IS THE PORTION OF THE SANDSPIT LINK ROAD FOR EARTHWORKS AND STABILISATION WORKS. THE DEVELOPER IS SEEKING A S176 APPROVAL FOR THE PROPOSED DEVELOPMENT OUTCOME THAT WILL BE IN PLACE PRIOR TO A SUBSTANTIVE APPLICATION BEING LODGED.

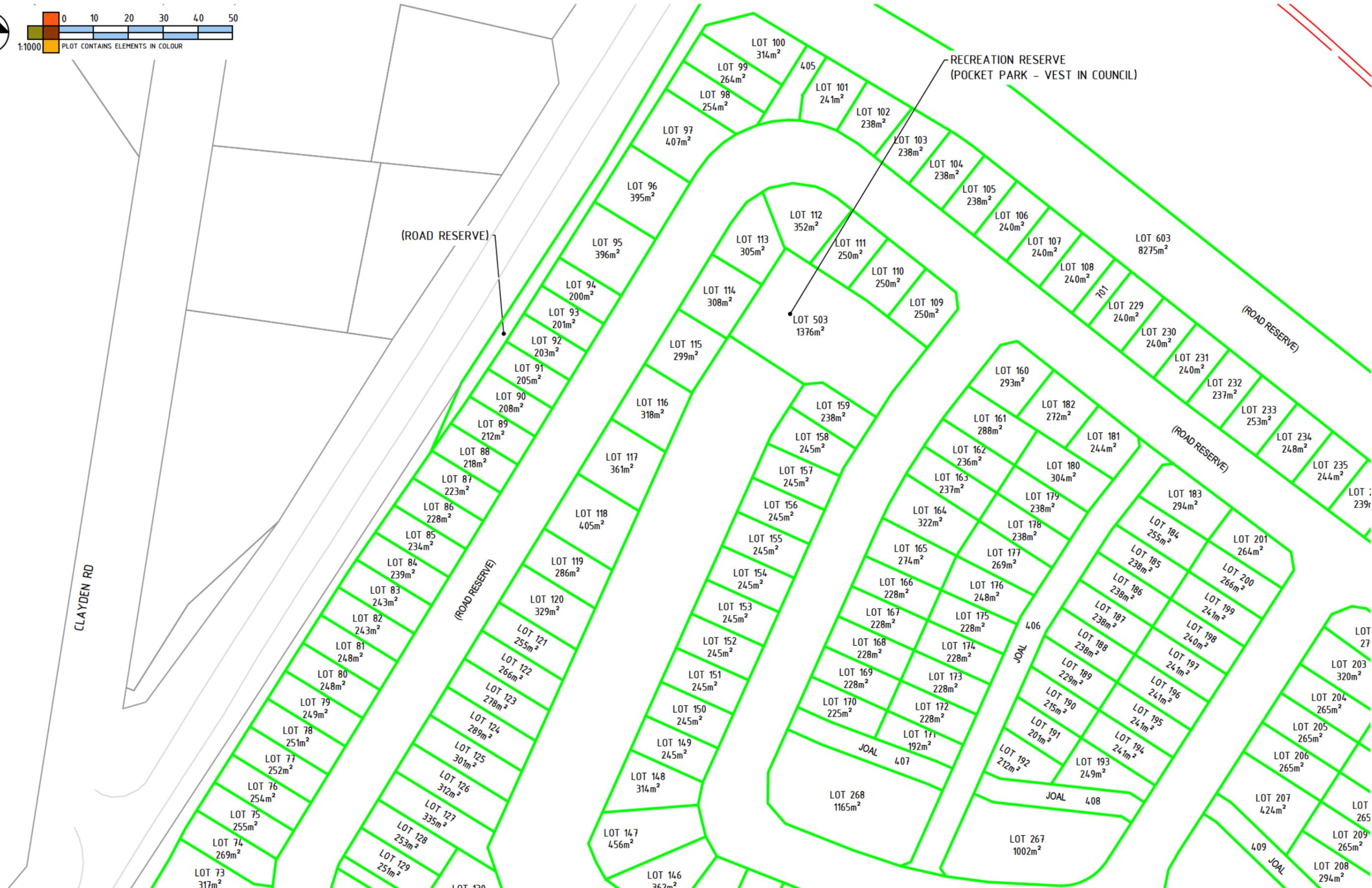
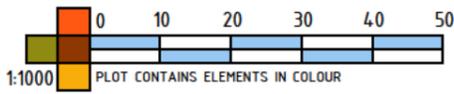
Rev	Date	Amendments	By

Drafter: V RIVIER Job Title: WARKWORTH RV DEVELOPMENT
 Designer: J PHILIPS Client: WARKWORTH RV LIMITED
 Checker: J PHILIPS Address: MATAKANA ROAD, WARKWORTH 0985
 Date: 20/11/2025 Drawing Title: SCHEME PLAN - FINAL - OVERALL

Drawing: 121 Rev: 0
 Scale: 1:5000 @ A3
 Project: 15175
 Issue: INFORMATION







Rev	Date	Amendments	By

Drafter: V RIVIER Job Title: WARKWORTH RV DEVELOPMENT
 Designer: J PHILIPS Client: WARKWORTH RV LIMITED
 Checker: J PHILIPS Address: MATAKANA ROAD, WARKWORTH 0985
 Date: 20/11/2025 Drawing Title: SCHEME PLAN - FINAL - ENLARGEMENT - 02

Drawing: 123 Rev: 0
 Scale: 1:1000 @ A3
 Project: 15175
 Issue: INFORMATION



SECTION 18

LOT 501
3794.1m²
UTILITY RESERVE
(VEST IN COUNCIL)

Lot 2
DP 188363

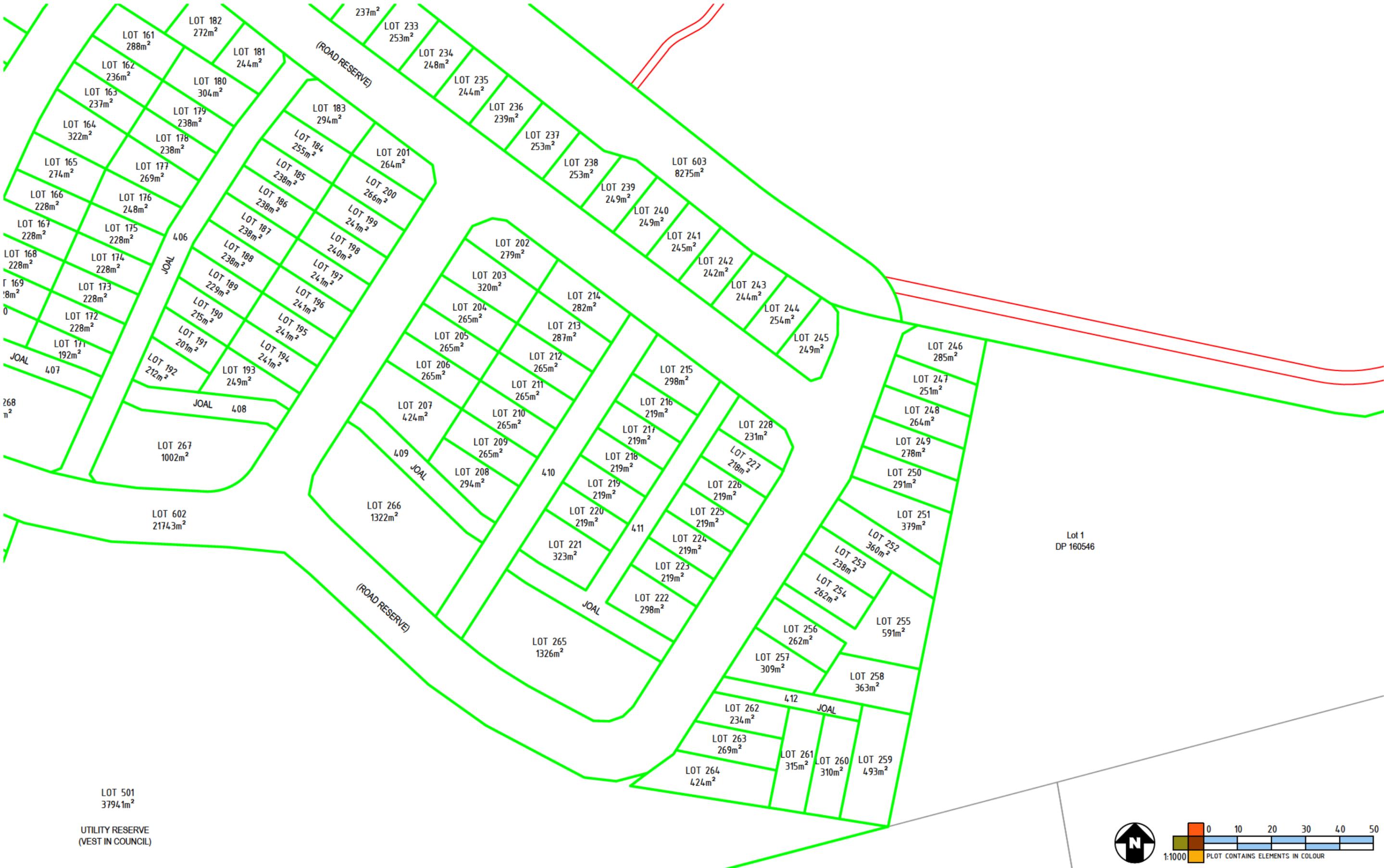


Rev	Date	Amendments	By

Drafter: V RIVIER Job Title: WARKWORTH RV DEVELOPMENT
 Designer: J PHILIPS Client: WARKWORTH RV LIMITED
 Checker: J PHILIPS Address: MATAKANA ROAD, WARKWORTH 0985
 Date: 20/11/2025 Drawing Title: SCHEME PLAN - FINAL - ENLARGEMENT 03

Drawing: 124 Rev: 0
 Scale: 1:1000 @ A3
 Project: 15175
 Issue: INFORMATION

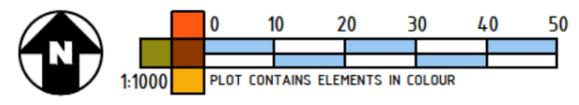
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Rev	Date	Amendments	By

Drafter: V RIVIER Job Title: WARKWORTH RV DEVELOPMENT
 Designer: J PHILIPS Client: WARKWORTH RV LIMITED
 Checker: J PHILIPS Address: MATAKANA ROAD, WARKWORTH 0985
 Date: 20/11/2025 Drawing Title: SCHEME PLAN - FINAL - ENLARGEMENT 04

Drawing: 125 Rev: 0
 Scale: 1:1000 @ A3
 Project: 15175
 Issue: INFORMATION



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Appendix B – Proposed Services Layout Sketch





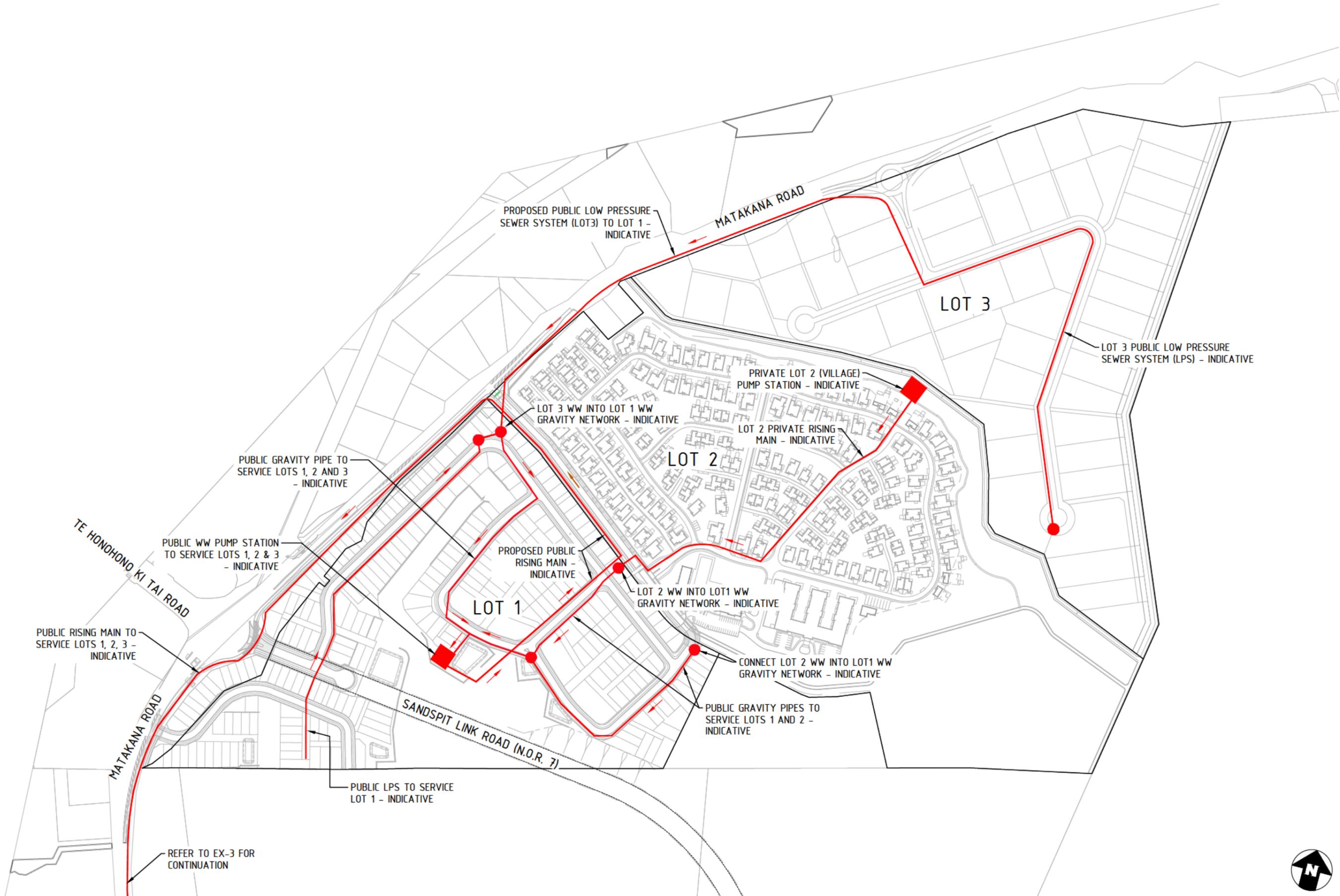
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Rev	Date	Amendments	RD By
0	20/11/25	ISSUED FOR INFORMATION	RD

Drafter: V.RIVIER Job Title: WARKWORTH RV DEVELOPMENT
 Designer: S RANKIN Client: WARKWORTH RV LIMITED
 Checker: S RANKIN Address: MATAKANA ROAD, WARKWORTH
 Date: 20/11/2025 Drawing Title: PUBLIC STORMWATER SERVICING PLAN

Drawing: EX-1 Rev: 0
 Scale: N.T.S.
 Project: 15175
 Issue: INFORMATION


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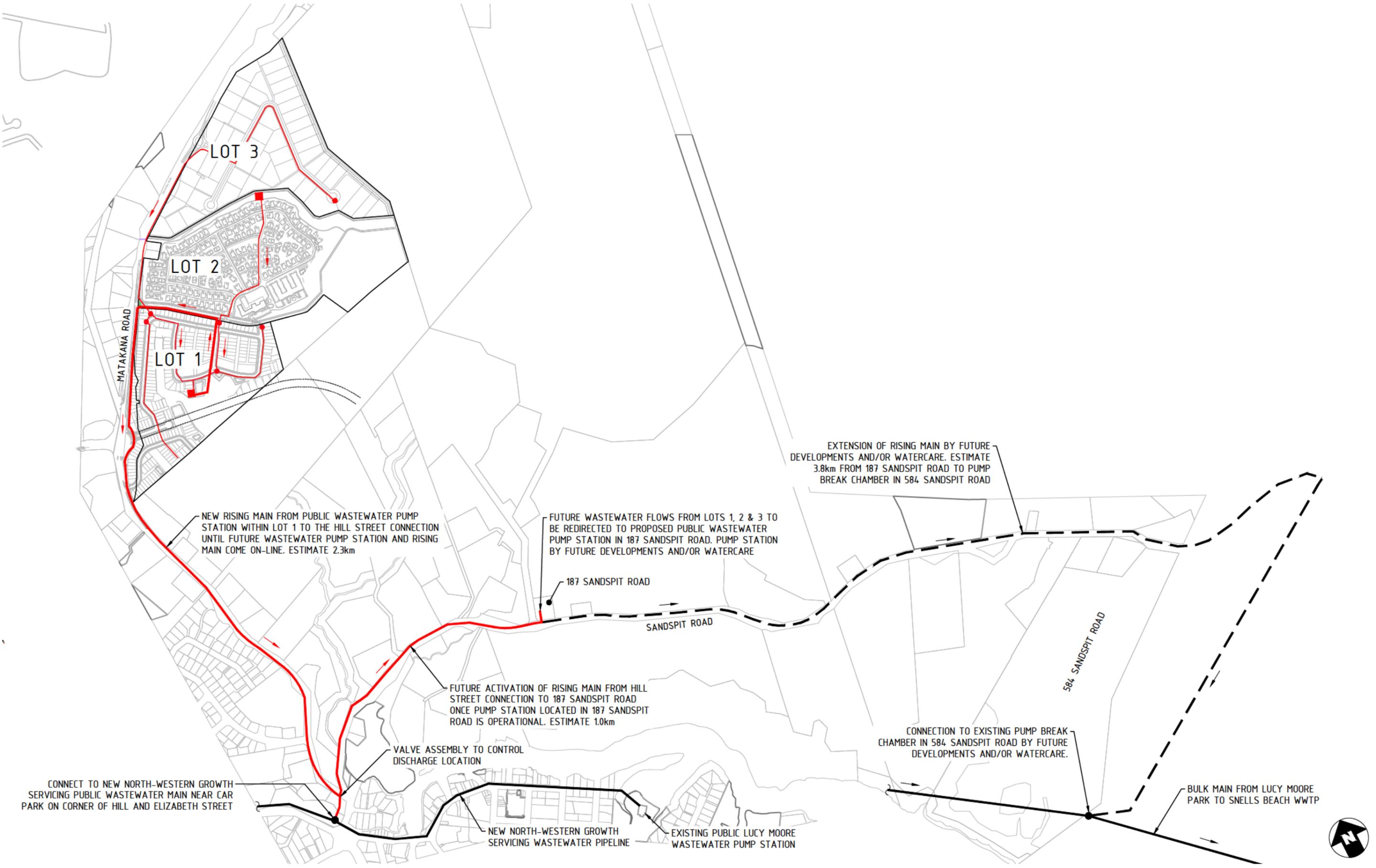
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Rev	Date	Amendments	RD By
0	20/11/25	ISSUED FOR INFORMATION	

Drafter: V.RIVIER Job Title: WARKWORTH RV DEVELOPMENT
 Designer: S RANKIN Client: WARKWORTH RV LIMITED
 Checker: S RANKIN Address: MATAKANA ROAD, WARKWORTH
 Date: 20/11/2025 Drawing Title: PUBLIC WASTEWATER SERVICING

Drawing: EX-2 Rev: 0
 Scale: N.T.S.
 Project: 15175
 Issue: INFORMATION


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LOT 3

LOT 2

LOT 1

MATAKANA ROAD

NEW RISING MAIN FROM PUBLIC WASTEWATER PUMP STATION WITHIN LOT 1 TO THE HILL STREET CONNECTION UNTIL FUTURE WASTEWATER PUMP STATION AND RISING MAIN COME ON-LINE. ESTIMATE 2.3km

FUTURE WASTEWATER FLOWS FROM LOTS 1, 2 & 3 TO BE REDIRECTED TO PROPOSED PUBLIC WASTEWATER PUMP STATION IN 187 SANDSPIT ROAD. PUMP STATION BY FUTURE DEVELOPMENTS AND/OR WATERCARE

EXTENSION OF RISING MAIN BY FUTURE DEVELOPMENTS AND/OR WATERCARE. ESTIMATE 3.8km FROM 187 SANDSPIT ROAD TO PUMP BREAK CHAMBER IN 584 SANDSPIT ROAD

187 SANDSPIT ROAD

SANDSPIT ROAD

584 SANDSPIT ROAD

FUTURE ACTIVATION OF RISING MAIN FROM HILL STREET CONNECTION TO 187 SANDSPIT ROAD ONCE PUMP STATION LOCATED IN 187 SANDSPIT ROAD IS OPERATIONAL. ESTIMATE 1.0km

VALVE ASSEMBLY TO CONTROL DISCHARGE LOCATION

CONNECTION TO EXISTING PUMP BREAK CHAMBER IN 584 SANDSPIT ROAD BY FUTURE DEVELOPMENTS AND/OR WATERCARE.

CONNECT TO NEW NORTH-WESTERN GROWTH SERVICING PUBLIC WASTEWATER MAIN NEAR CAR PARK ON CORNER OF HILL AND ELIZABETH STREET

NEW NORTH-WESTERN GROWTH SERVICING WASTEWATER PIPELINE

EXISTING PUBLIC LUCY MOORE WASTEWATER PUMP STATION

BULK MAIN FROM LUCY MOORE PARK TO SNELLS BEACH WWTP

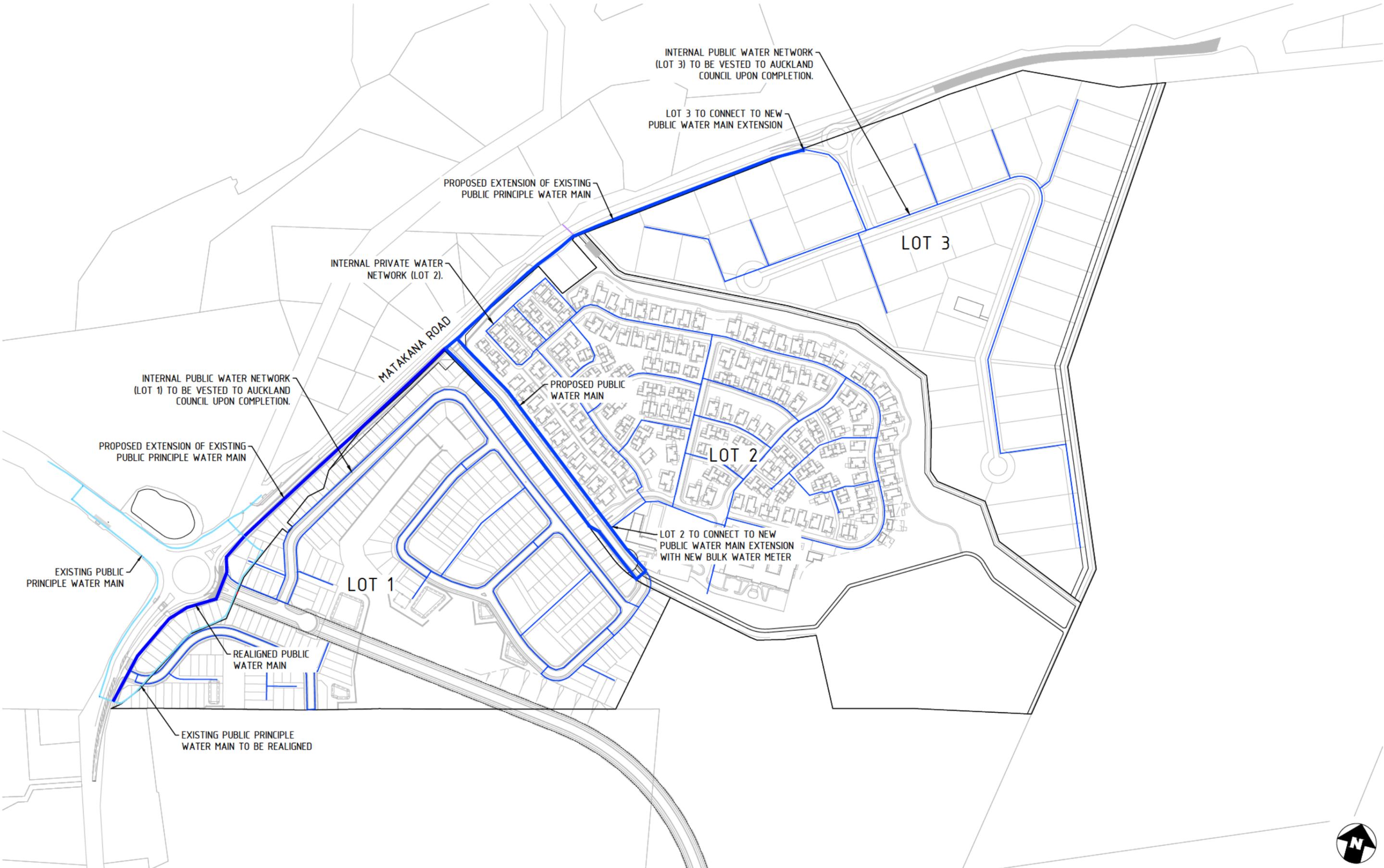


Rev	Date	Amendments	RD By
0	20/11/25	ISSUED FOR INFORMATION	

Drafter: V.RIVIER Job Title: WARKWORTH RV DEVELOPMENT
 Designer: S RANKIN Client: WARKWORTH RV LIMITED
 Checker: S RANKIN Address: MATAKANA ROAD, WARKWORTH
 Date: 20/11/2025 Drawing Title: PUBLIC WASTEWATER SERVICING

Drawing: EX-3 Rev: 0
 Scale: N.T.S.
 Project: 15175
 Issue: INFORMATION

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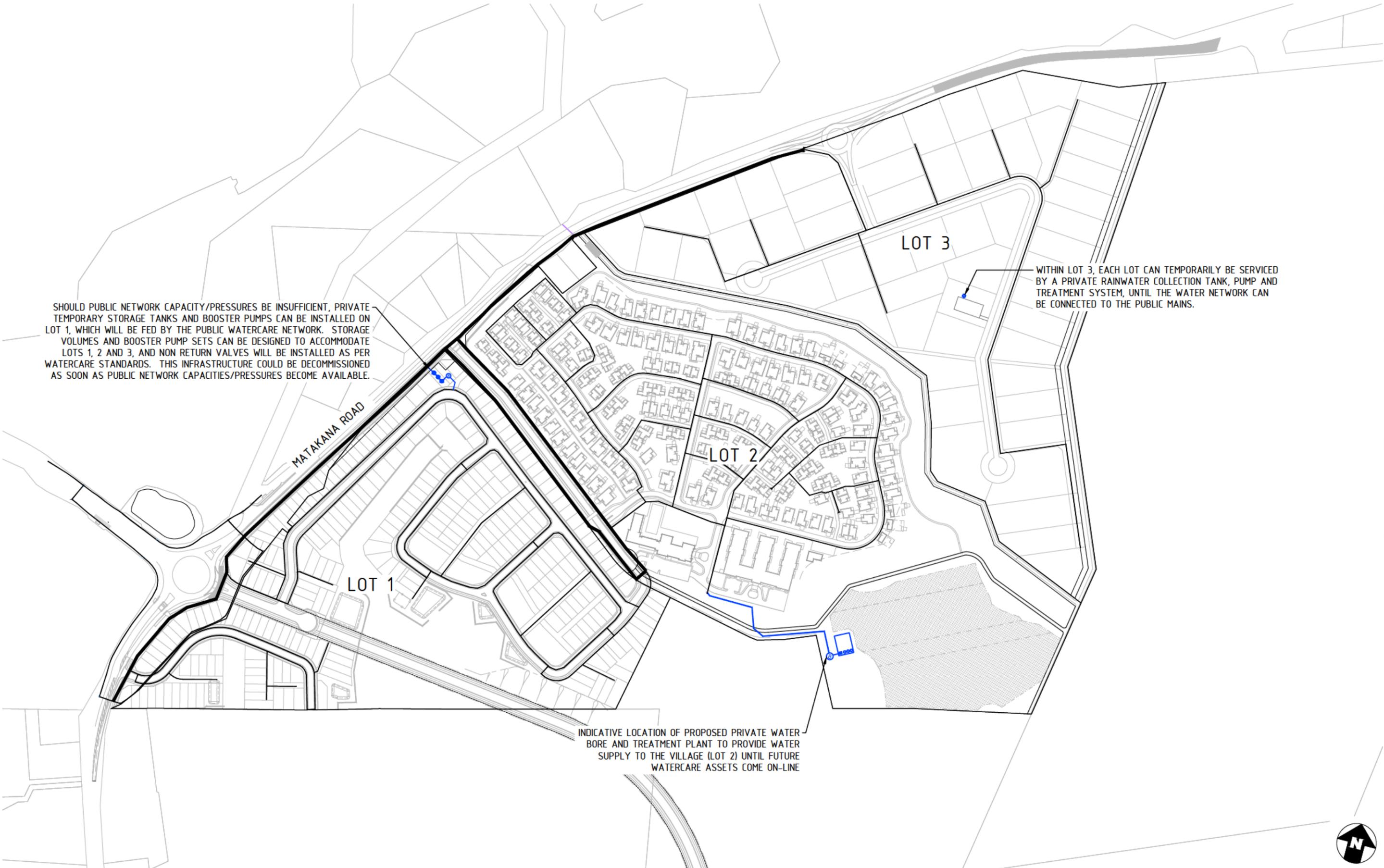


Rev	Date	Amendments	RD By
0	20/11/25	ISSUED FOR INFORMATION	RD

Drafter: V.RIVIER Job Title: WARKWORTH RV DEVELOPMENT
 Designer: S RANKIN Client: WARKWORTH RV LIMITED
 Checker: S RANKIN Address: MATAKANA ROAD, WARKWORTH
 Date: 20/11/2025 Drawing Title: PUBLIC WATER SUPPLY SERVICING

Drawing: EX-5 Rev: 0
 Scale: N.T.S.
 Project: 15175
 Issue: INFORMATION

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SHOULD PUBLIC NETWORK CAPACITY/PRESSURES BE INSUFFICIENT, PRIVATE TEMPORARY STORAGE TANKS AND BOOSTER PUMPS CAN BE INSTALLED ON LOT 1, WHICH WILL BE FED BY THE PUBLIC WATERCARE NETWORK. STORAGE VOLUMES AND BOOSTER PUMP SETS CAN BE DESIGNED TO ACCOMMODATE LOTS 1, 2 AND 3, AND NON RETURN VALVES WILL BE INSTALLED AS PER WATERCARE STANDARDS. THIS INFRASTRUCTURE COULD BE DECOMMISSIONED AS SOON AS PUBLIC NETWORK CAPACITIES/PRESSURES BECOME AVAILABLE.

WITHIN LOT 3, EACH LOT CAN TEMPORARILY BE SERVICED BY A PRIVATE RAINWATER COLLECTION TANK, PUMP AND TREATMENT SYSTEM, UNTIL THE WATER NETWORK CAN BE CONNECTED TO THE PUBLIC MAINS.

INDICATIVE LOCATION OF PROPOSED PRIVATE WATER BORE AND TREATMENT PLANT TO PROVIDE WATER SUPPLY TO THE VILLAGE (LOT 2) UNTIL FUTURE WATERCARE ASSETS COME ON-LINE

0	20/11/25	ISSUED FOR INFORMATION	RD
Rev	Date	Amendments	By

Drafter: V.RIVIER Job Title: WARKWORTH RV DEVELOPMENT
 Designer: S RANKIN Client: WARKWORTH RV LIMITED
 Checker: S RANKIN Address: MATAKANA ROAD, WARKWORTH
 Date: 20/11/2025 Drawing Title: ALTERNATIVE WATER SUPPLY SERVICING OPTIONS

Drawing: EX-6 Rev: 0
 Scale: N.T.S.
 Project: 15175
 Issue: INFORMATION

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